In the Specification:

Please make the following changes to the second paragraph on page 3:

The complimentary nature of the biological portions of the peptide amphiphiles may mimic amino acid sequences found in naturally occurring peptides. Self-assembled gels composed of peptide-amphiphile nanofibers with the RGD peptide sequence mimic the function of collagen fibrils to organize and direct the growth of the hydroxyapatite crystals. Other potentially useful amino acid sequences in such peptides may include the SEQ ID NO:1 YIGSR and SEQ ID NO:2 IKVAV amino acid sequences. Such amino acid sequences in self assembled peptide amphiphiles may have a synergistic effect on cell growth and nerve regeneration. The growth of cells on substrates implanted or delivered to the body would be beneficial to implantation of artificial hearts, restoring nerve function, healing of grafting blood vessels; forming skin grafts and preparing "artificial skin" by culturing epidermal cells on a fibrous lattice.

Please amend the description of FIG. 9 on page 13 (lines 24-26) with the following description of FIG. 9:

FIG. 9 is a schematic structural illustration of a peptide $\underline{C_{16}H_{31}O(SEQ\ ID\ NO:3)}$ useful for attachment to coatings of the present invention, where (PO_4) indicates phosphorylated serine;

Please make the following changes to the second paragraph on page 19, which continues to the top of page 20:

The peptide-amphiphiles and their self assembled nanofibers may promote adhesion and growth of cells on their surfaces. For example, the cell adhesion ligand RGD has been found in other contexts to play an important role in integrin-mediated cell

adhesion. Peptide-amphiphile species with acidic amino acids and an amino acid with the RGD ligand could be used to mediate cell adhesion to the peptide-amphiphiles, their self assembled nanofibers or micelles, or nanofiber gels. The amino acid sequence SEQ ID NO:2 IKVAV has been identified in other contexts as important for neuron growth and development. Accordingly, peptide-amphiphile species with acidic amino acids and the SEQ ID NO:2 IKVAV sequence could be used in the practice of embodiments of this invention to mediate neuron growth to the peptide-amphiphiles, their self assembled nanofibers, micelles, or nanofiber gels. The amino acid sequence SEQ ID NO:1 YIGSR has been identified in other contexts as important in for promoting cell-substrate adhesion among nerve cells and may also play a role in axon guidance. Accordingly, peptide-amphiphile species with acidic amino acids and the SEQ ID NO:1 YIGSR sequence could be used in embodiments of the practice of this invention to promote cell-substrate adhesion among nerve cells to the peptide-amphiphiles, their self assembled nanofibers, micelles, or their nanofiber gels. For example in dentin, the phosphophoryn protein family contains numerous repeats of the amino acid sequences Asp-Ser(P)-Ser(P) and Ser(P)-Asp-Ser(P). These massively phosphorylated proteins are suspected to play an important role in hydroxyapatite mineralization. Accordingly, phosphoserine residues can be incorporated into the peptide sequence which, after self assembly, allows the fiber to display a highly phosphorylated surface similar to that presented by a long peptide segment. Such a peptide,, in part, captures the repetitive organization of phosphate groups found in phosphophoryn proteins.

On page 21, please amend Table 1 as follows:

Table 1			
PA	**N-terminus**	**Peptide (N to C)**	**C-terminus**
1	C16	SEQ ID NO:4 CCCCGGGS(P)RGD	H
2	C16	SEQ ID NO:5 CCCCGGGS(P)	H
3	C12	SEQ ID NO:4 CCCCGGGS(P)RGD	H
4	C10	SEQ ID NO:4 CCCCGGGS(P)RGD	H
5	C14	SEQ ID NO:4 CCCCGGGS(P)RGD	H
6	C10	SEQ ID NO:6 GGGS(P)RGD	H
7	C16	SEQ ID NO:6 GGGS(P)RGD	H
8	C16	SEQ ID NO:7 AAAAGGGS(P)RGD	H
9	C10	SEQ ID NO:7 AAAAGGGS(P)RGD	H
10	C16	SEQ ID NO:8 CCCCGGGS(P)KGE	H
11	C10	SEQ ID NO:9 AAAAGGGS(P)KGE	H
12	C16	SEQ ID NO:9 AAAAGGGS(P)KGE	H
13	C22	SEQ ID NO:4 CCCCGGGS(P)RGD	H
14	C16	SEQ ID NO:10 CCCCGGGSRGD	H
15	C16	SEQ ID NO:11 CCCCGGGEIKVAV	H
16	C16	SEQ ID NO:12 CCCCGGGS(P)RGDS	H

Please make the following changes to the paragraph after Table 1 on page 21, which continues to the top of page 22:

Depending upon desired cell or tissue growth, a phosphorylated moiety may not be required. As discussed above, cellular adhesion or interaction is promoted by a particular sequence of the peptide components. With reference to PA's 10-12 and 15, a non-RGD sequence can be utilized depending upon cellular target. In particular, the SEQ ID NO:2 IKVAV sequence has been identified in other contexts as important for neuron growth and development. Accordingly the amphiphile compositions of this invention can include a peptide component having such a sequence for corresponding use. Lastly, with respect to Table 1, it is noted that several PA compositions do not include cysteine residues. While cysteine amino acids can be used to enhance intermolecular nanofiber stability, it is not required for self assembly of micelles or nanofibers, nor is it necessary for binding of peptide amphiphile or their micelles to secondary surfaces. In a preferred embodiment, cysteine amino acids are present to stabilize the self assembled micelles or nanofibers during the peptide coupling reactions.

On page 22, please amend Table 2 as follows:

Table 2				
PA	**N-terminus**	**Peptide (N to C)**	**C-terminus**	**Net Charge at pH7**
17	C16	SEQ ID NO:4 CCCCGGGS(P)RGD	COOH	-3
18	C16	SEQ ID NO:7 AAAAGGGS(P)RGD	COOH	-3
19	C10	SEQ ID NO:7 AAAAGGGS(P)RGD	COOH	-3
20	C16	SEQ ID NO:10 CCCCGGGSRGD	COOH	-1
21	C16	SEQ ID NO:11 CCCCGGGEIKVAV	COOH	-1
22	C16	SEQ ID NO:13 CCCCGGGKIKVAV	COOH$_2$	+1

Please make the following changes to the first full paragraph on page 24:

A number of cells may be grown on the electrode, stent, scaffold, surgical device having a coating of the self assembled peptide amphiphile nanofibers. The scaffold or surgical implant coating is comprised of self assembled peptide amphiphiles with peptides chosen for optimal growth of that particular type of cell. For example peptide amphiphiles with the RGD, SEQ ID NO:2 IKVAV, KGE, SEQ ID NO:14 RGDS peptide sequences, and self assembled nanofibers comprised of them or combinations of them may be optimal for cell growth.

On page 38, please amend Table 3 as follows:

Table 3 Peptide amphiphiles; S(P) represents a phosphorylated serine)			
PA	**N-terminus**	**Peptide (N to C)**	**C-terminus**
1	C16	SEQ ID NO:4 CCCCGGGS(P)RGD	H
2	C16	SEQ ID NO:5 CCCCGGGS(P)	H
3	C12	SEQ ID NO:4 CCCCGGGS(P)RGD	H
4	CIO	SEQ ID NO:4 CCCCGGGS(P)RGD	H
5	C14	SEQ ID NO:4 CCCCGGGS(P)RGD	H
10	C16	SEQ ID NO:15 CCCCGGGS(P)KGE	H
11	CIO	SEQ ID NO:9 AAAAGGGS(P)KGE	H
12	C16	SEQ ID NO:16 CCCCGGGS(P)DS(P)D	
13	C22	SEQ ID NO:4 CCCCGGGS(P)RGD	H
14	C16	SEQ ID NO:10 CCCCGGGSRGD	H
15	C16	SEQ ID NO:11 CCCCGGGEIKVAV	H
16	C16	SEQ ID NO:12 CCCCGGGS(P)RGDS	H

Finally, please insert pages 1 through 6, corresponding to the sequence listing for the this application, after page 64 of the patent application (after the Abstract of the Invention).